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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,545	04/12/2004	Michael D. Landon	11897.16	1802

21999 7590 06/27/2008
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EXAMINER	
BLAIR, KILE O	

ART UNIT	PAPER NUMBER
2615	

MAIL DATE	DELIVERY MODE
06/27/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/822,545	LANDON ET AL.	
	Examiner	Art Unit	
	Kile O. Blair	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 June 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This action is in response to the communication filed on June 2, 2008. Currently amended claims 1, 11, 18, and original claims 2-10, 12-17, and 19 are pending.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-3, 6, and 9-15 are rejected under 35 U.S.C. 102(a) as being anticipated by Lee et al. (US Pub No. 2003/0123680 A1).

Regarding claim 1, Lee et al. teaches a temporal volume control device comprising: a monitoring component comprising a processing element that creates a temporal ambient noise map (microphone 9 and microcontroller 12 which are involved in creating a series of average external noise levels corresponding to a series of predetermined time periods, [0033]), said temporal ambient noise map comprising a plurality of average ambient noise values corresponding to a plurality of time values over a period of time (the noise map comprises the series of average external noise levels corresponding to a series of predetermined time periods for a certain cumulative period of time, [0033]); and an audio output component for receiving information corresponding to said temporal ambient noise map and producing an audio volume level substantially corresponding to and greater than said temporal ambient noise map (the microcontroller 12 transmits a volume control signal based on the volume level from the volume set up table ensuring that the output volume is substantially greater than the

average external noise value for each of the time periods in the series of time periods, [0033]).

Regarding claim 2, Lee et al. teaches the temporal volume control device of claim 1, wherein said audio output component utilizes said temporal ambient noise map to predict future ambient noise values (the volume controller 14 relies on the average external noise value for the preceding time period on the temporal ambient noise map to predict the external noise value for the current time period in order to make an audio output adjustment, [0033]).

Regarding claim 3, Lee et al. teaches the temporal volume control device of claim 1, wherein a difference between said audio volume level and said temporal ambient noise map is constant over time (the volume set up table, TABLE 1, ensures that the audio volume level will constantly be higher than the average external noise value for the time period).

Regarding claim 6, Lee et al. teaches the temporal volume control device of claim 1, further comprising an ambient noise monitoring component for iteratively recording at least one ambient noise value corresponding to a time value for at least one period of time to create said temporal ambient noise map (microphone 9 and microcontroller 12 which are involved in creating a series of average external noise levels corresponding to a series of predetermined time periods repetitively for a cumulative period of time, [0033]).

Regarding claim 9, Lee et al. teaches the temporal volume control device of claim 6, wherein said ambient noise monitoring component further averages said at

least one ambient noise value corresponding to said time value over said at least one period of time to obtain an average ambient noise value corresponding to said time value (calculates an average of the input external noise for a predetermined period of time, [0033]).

Regarding claim 10, Lee et al. teaches the temporal volume control device of claim 9, wherein said temporal ambient noise map comprises said average ambient noise values corresponding to said time values over said period of time (microphone 9 and microcontroller 12 which are involved in creating a series of average external noise levels corresponding to a series of predetermined time periods repetitively for a cumulative period of time, [0033]).

Regarding claim 11, Lee et al. teaches a method for controlling audio output volume, said method comprising: monitoring levels of ambient noise over at least one period of time (the noise map comprises the series of average external noise levels corresponding to a series of predetermined time periods for a certain cumulative period of time, [0033]); averaging said levels of ambient noise to create a temporal ambient noise map, said temporal ambient noise map comprising a plurality of average ambient noise values corresponding to a plurality of time values over said period of time (the noise map comprises the series of average external noise levels corresponding to a series of predetermined time periods for a certain cumulative period of time, [0033]); communicating said temporal ambient noise map to an audio output device, said audio output device capable of automatically adjusting an audio output volume level to substantially correspond to said temporal ambient noise map; and producing, via said

audio output device, audio information according to said audio output volume level map (the microcontroller 12 transmits a volume control signal based on the volume level from the volume set up table ensuring that the output volume is substantially greater than the average external noise value for each of the time periods in the series of time periods, [0033]).

Regarding claim 12, Lee et al. teaches the method of claim 11, wherein said monitoring further comprises correlating at least one ambient noise value with at least one time value over said at least one period of time (microphone 9 and microcontroller 12 which are involved in creating a series of average external noise levels corresponding to a series of predetermined time periods repetitively for a cumulative period of time, [0033]).

Regarding claim 13, Lee et al. teaches the method of claim 12, wherein said averaging further comprises determining an average ambient noise value corresponding to said at least one time value over said at least one period of time (microphone 9 and microcontroller 12 which are involved in creating a series of average external noise levels corresponding to a series of predetermined time periods repetitively for a cumulative period of time, [0033]).

Regarding claim 14, Lee et al. teaches the method of claim 11, further comprising maintaining said audio output volume level at a level greater than levels corresponding to said temporal ambient noise map (the microcontroller 12 transmits a volume control signal based on the volume level from the volume set up table ensuring

that the output volume is substantially greater than the average external noise value for each of the time periods in the series of time periods, [0033]).

Regarding claim 15, Lee et al. teaches the method of claim 14, wherein a difference between said audio output volume level and said levels corresponding to said temporal ambient noise map is constant over time (the volume set up table, TABLE 1, ensures that the audio volume level will constantly be higher than the average external noise value for the time period).

Claim Rejections - 35 USC § 103

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 4, 7, 8, 18, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al.

Regarding claim 4, Lee et al. teaches the temporal volume control device of claim 1. Although Lee et al. does not explicitly teach, as part of the volume control system, the feature wherein said audio output component further comprises a manual volume control to selectively override said audio volume level, it would have been obvious to include such a manual volume control as disclosed by Lee et al. [0006] since this was well known in the art and recognized by Lee et al.

Regarding claims 7 and 8, Lee et al. teaches the temporal volume control device of claim 6. Although Lee et al. does not explicitly teach the feature wherein the ambient noise monitoring component operates independently or integrally of said audio output component, it would have been obvious to one of ordinary skill in the art to implement the volume control system of Lee et al. with the ambient noise monitoring component and the audio output component either independent or integral of each other since either embodiment involves predictable results involving routine skill in the art.

Regarding claim 16, Lee et al. teaches the method of claim 11. Although Lee et al. does not explicitly teach, as part of the volume control system, the feature wherein said audio output component further comprises selectively overriding, via a manual volume control, said audio output volume level, it would have been obvious to include

such a manual volume control as disclosed by Lee et al. [0006] since this was well known in the art and recognized by Lee et al.

Regarding claims 18 and 19 are substantially similar to claims 1 and 9 except that claims 18 and 19 involve a computer readable medium with a computer program for implementing the system of claims 1 and 9. It would have been obvious to one of ordinary skill in the art to implement the system of Lee et al. as a computer program since doing so would yield predictable results.

Claims 5 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. in view of McGregor et al. (US Pat. No. 4,052,720).

Regarding claim 5, Lee et al. teaches the temporal volume control device of claim 1. Although Lee et al. does not explicitly teach the feature wherein said at least one period of time comprises twenty-four hours, it would have been obvious to one of ordinary skill in the art to operate the volume control system and temporal ambient noise map of Lee et al. for a cumulative period of twenty-four hours since the determination of ambient noise within a room throughout a twenty-four hour period and the subsequent adjustment of an output system is taught by McGregor et al. (col. 4, line 61- col. 5, line 2) and would be obvious to try as a time period over which to determine a temporal ambient noise map.

Regarding claim 17, Lee et al. teaches the method of claim 11. Although Lee et al. does not explicitly teach the feature wherein said at least one period of time comprises twenty-four hours it would have been obvious to one of ordinary skill in the art for the same reasons as given in the rejection to claim 5 above.

Response to Arguments

Applicant's arguments filed 6/2/2008 have been fully considered but they are not persuasive.

It is noted that, although it appears the applicant regards as his invention a temporal noise map where a series of discrete time periods (each of which has a corresponding average external noise value) is *predetermined* for a cumulative time period encompassing the series of individual discrete time periods, the language of claim 1 is broad enough to encompass a system such as that of Lee et al. where there is an *ongoing "return to operation"* as described by the applicant and no pre-determination of the temporal ambient noise map for a plurality of discrete time periods.

In order to avoid anticipation of claim 1 by Lee et al., the claim must be amended to require that the temporal ambient noise map be predetermined for a plurality of discrete time periods (a cumulative time period) before any audio output adjustment operation is begun.

Although Lee et al. continuously re-calculates the average external noise value for each time period and then sets the audio output value to be substantially corresponding and greater to that average external noise value for the next time period based on the volume set up table, the volume control system of Lee et al. meets the limitation of claim 1 that the temporal ambient noise map *comprises a plurality of average ambient noise values corresponding to a plurality of time values over a period of time* since the disclosed operation of Lee et al. does involve a plurality of average

ambient noise values that each correspond to a time value for an overall cumulative period of time.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kile O. Blair whose telephone number is (571) 270-3544. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571) 272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KB
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